



FIG. 2

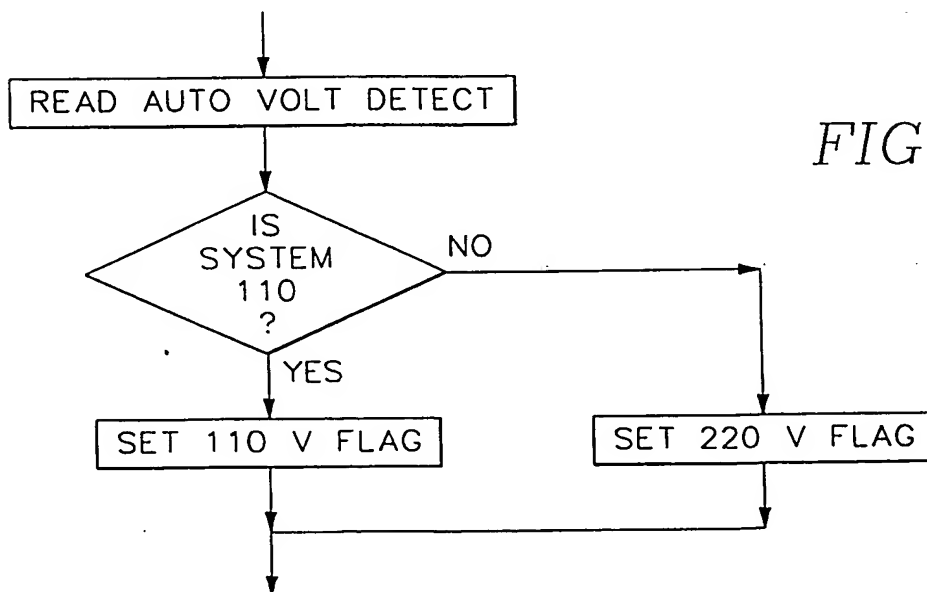
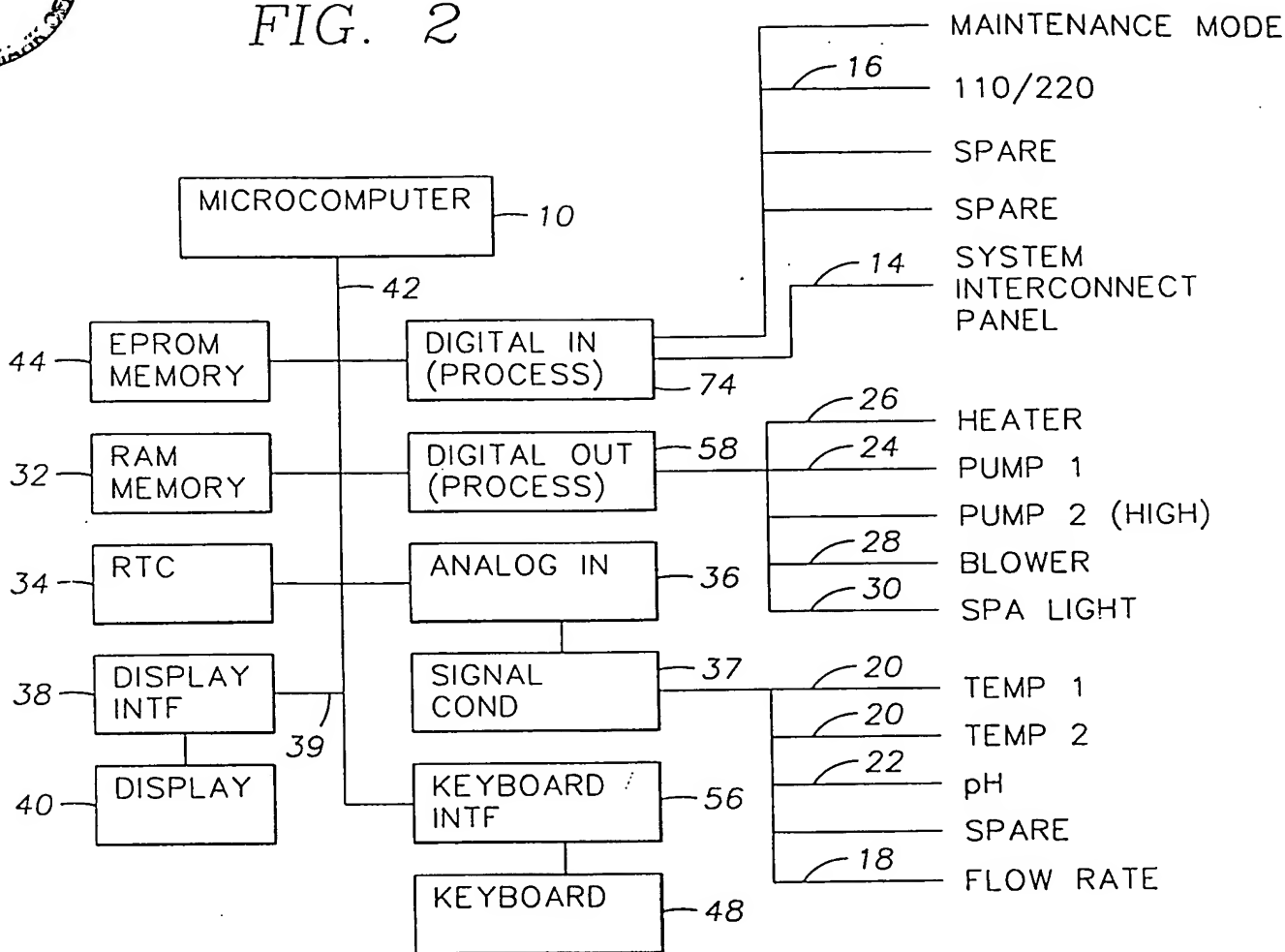


FIG. 8

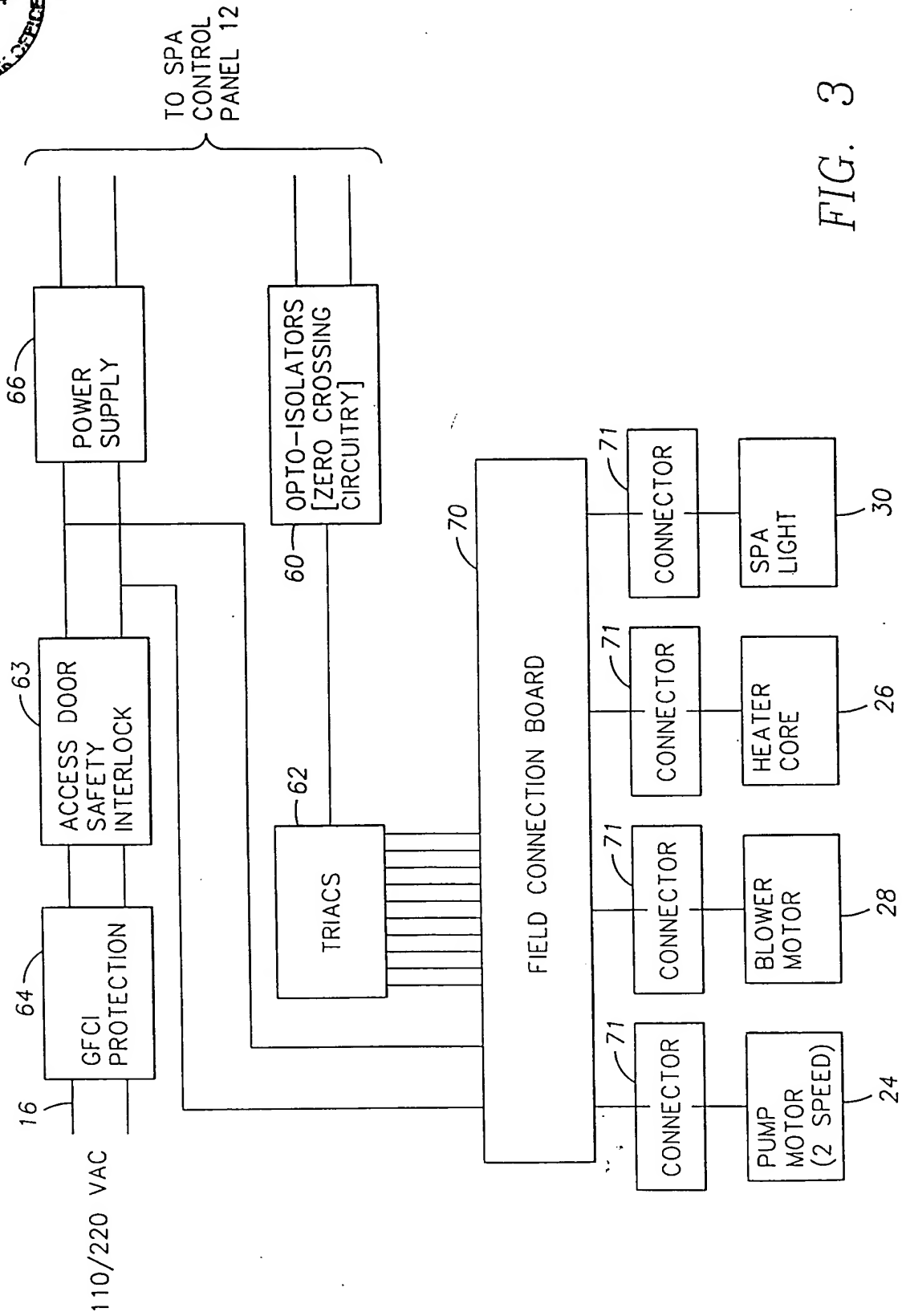


FIG. 3

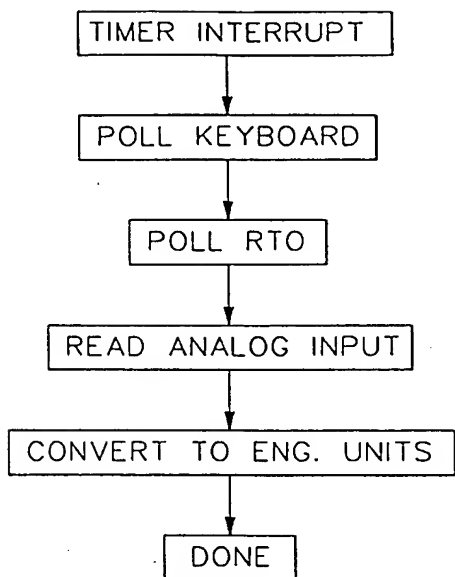


FIG. 12

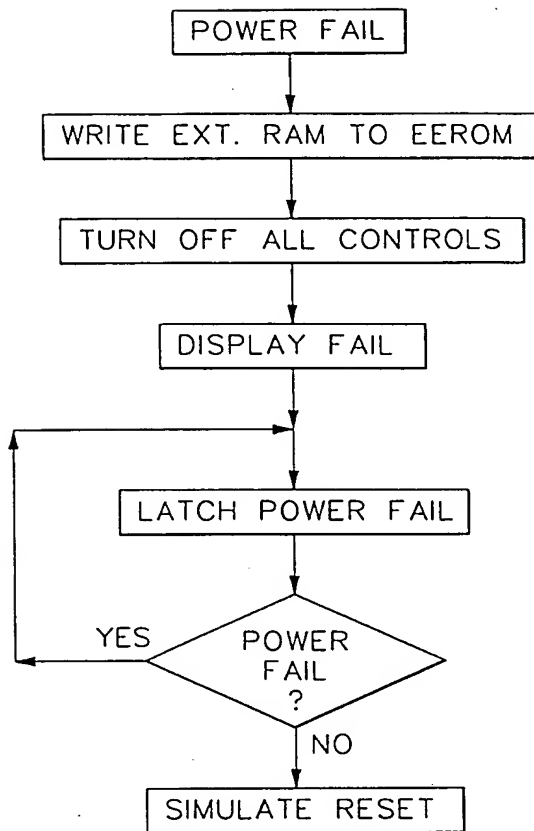


FIG. 13

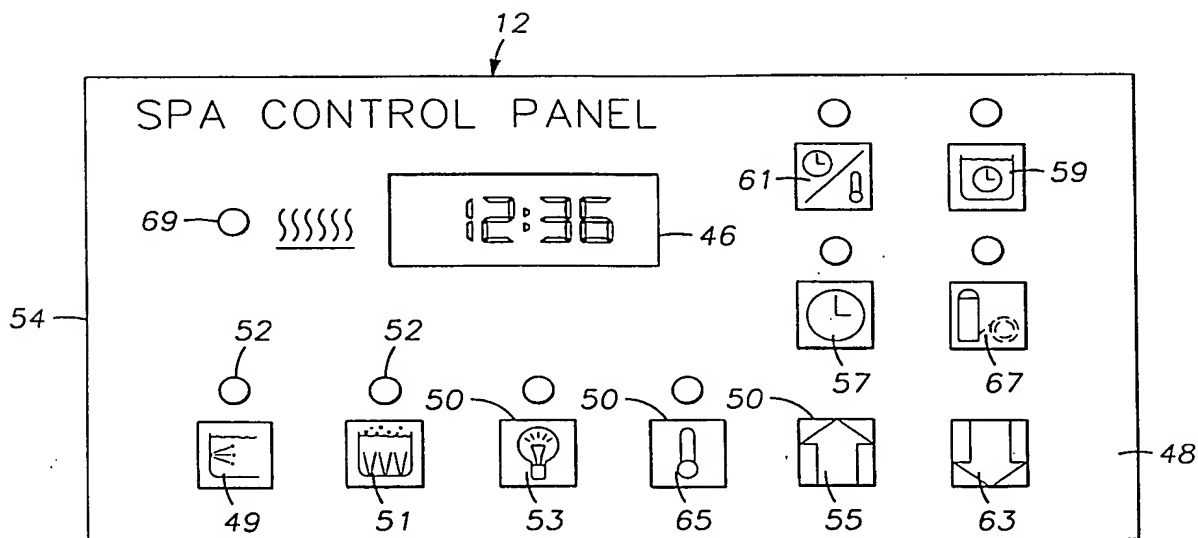


FIG. 5

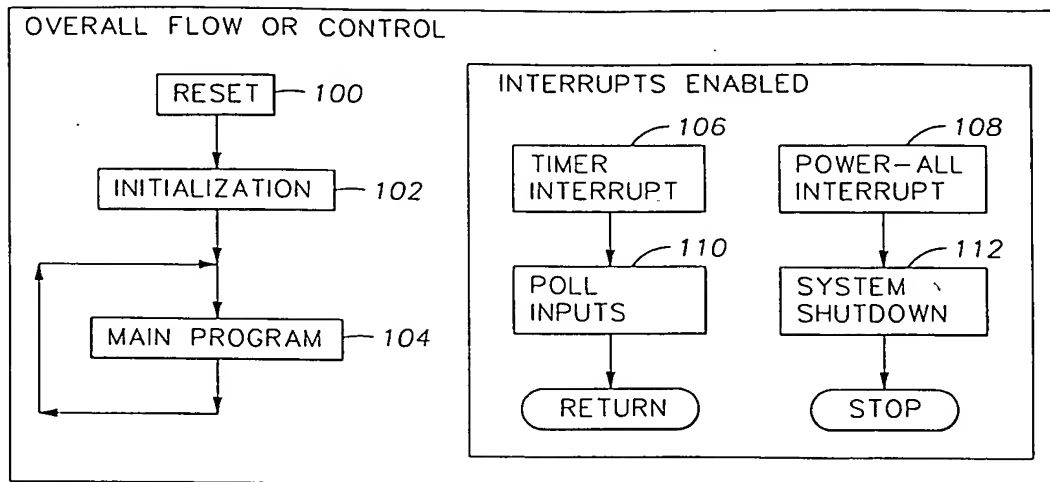


FIG. 6

$TEMP_F$ = DESIRED TEMPERATURE OF SPA WATER
 $TEMP_1$ = TEMPERATURE AT FIRST SENSOR (S_1)
 $TEMP_2$ = TEMPERATURE AT SECOND SENSOR (S_2)
 $TEMP_\Delta$ = $TEMP_1 - TEMP_2$
 Δ_L = LIMIT OF ACCEPTABLE TEMPERATURE DIFFERENCE (+ OR -)

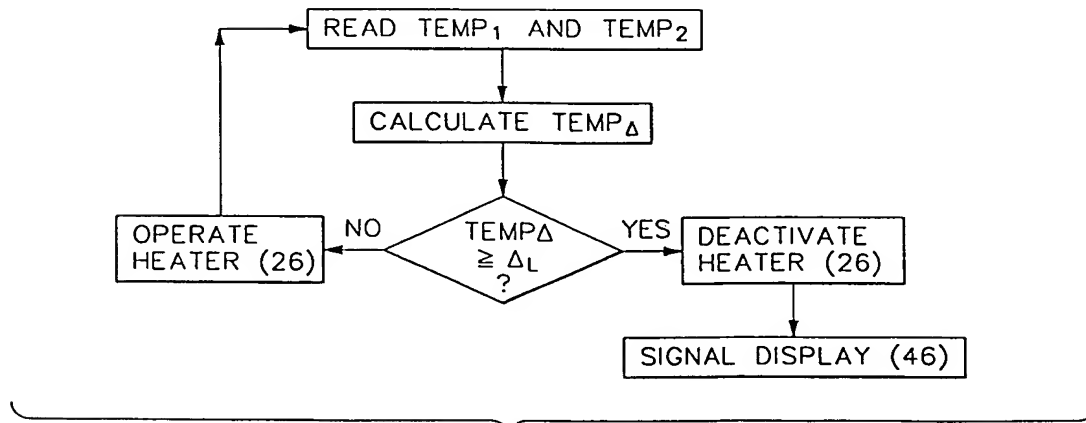


FIG. 7



RATE = RATE OF HEATING
RATE_{AV} = RATE OF HEATING (AVERAGE)
TEMP_I = INITIAL TEMPERATURE OF SPA WATER
TEMP_F = DESIRED TEMPERATURE OF SPA WATER
TEMP_Δ = TEMP_F - TEMP_I
TIME_I = TIME (INITIAL)
TIME_F = TIME (FINAL)
TIME_Δ = TIME_F - TIME_I

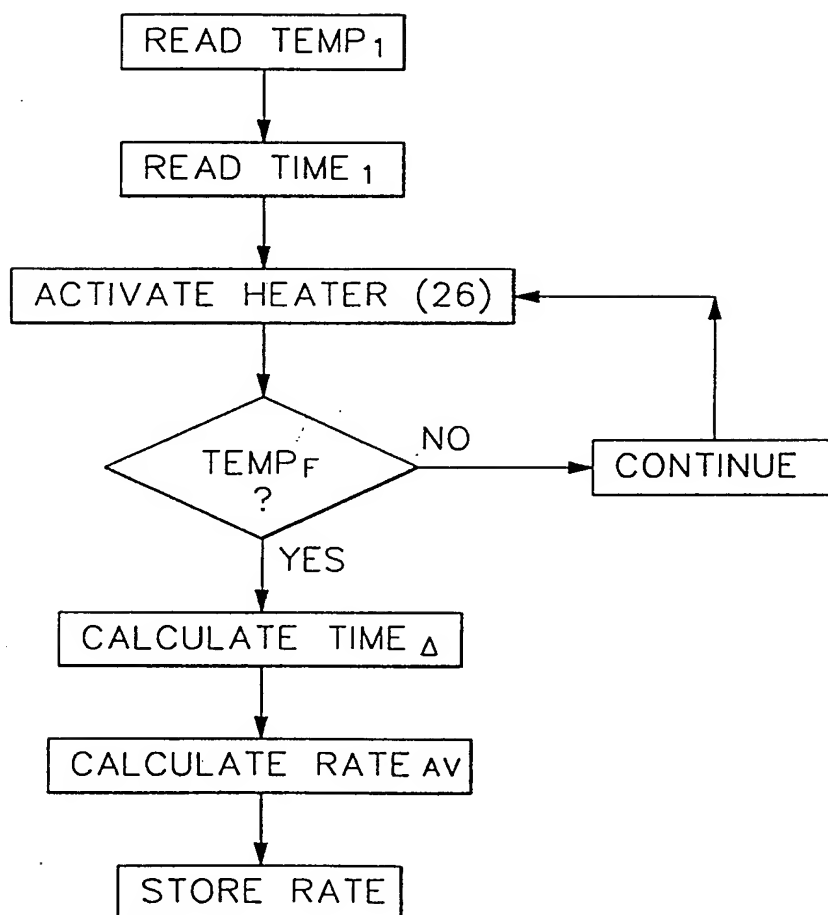


FIG. 9



$TEMP_I$ = INITIAL TEMPERATURE OF SPA WATER
 $TEMP_F$ = FINAL (DESIRED) TEMPERATURE OF SPA WATER
 $TEMP_{\Delta}$ = $TEMP_F - TEMP_I$
RATE = RATE OF HEATING
RATE_{AV} = RATE OF HEATING (AVERAGE)
TIME_I = TIME (INITIAL)
TIME_F = TIME (FINAL)
TIME_Δ = TIME_F - TIME_I

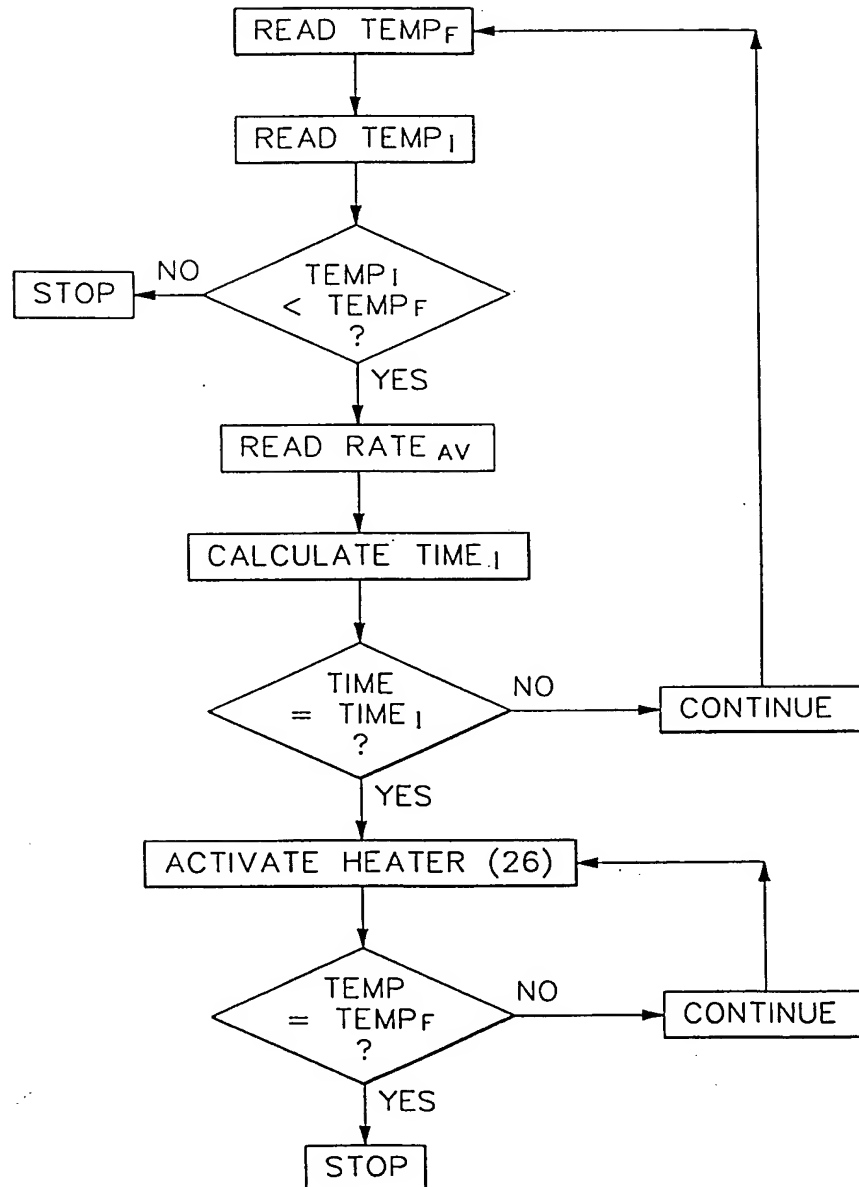


FIG. 10

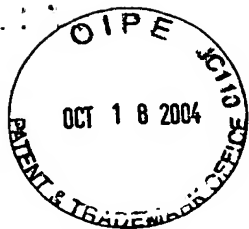


FIG. 11

